

Date: 31 January 2022

To: James Patrick Dufour, Project Manager

From: Corey Mack, PE

Subject: 251 South Union - Transportation Support

WCG has reviewed the trip generation for the proposed redevelopment of 251 South Union Street in Burlington. This memorandum estimates the trip generation of the existing land use, proposed land use, and net difference following the redevelopment.

PROJECT PARAMETERS

The project site is located at 251 South Union Street in Burlington (Figure 1). The property appears to be within two zoning districts: residential medium density (RM) and residential low density (RL) (Figure 2). The site is within the neighborhood parking district (Figure 3). The site proposes renovating the existing building which contained a 6,000 square foot law office into an eight-unit multifamily residential building.

ESTIMATED TRIP GENERATION

Trip generation refers to the number of vehicle trips originating at or destined for a particular land use development. WCG consulted the ITE Trip Generation Manual (TGM), 11th Edition to estimate base vehicle trips. Base vehicle trips are the total estimated vehicle trips prior to any reductions associated with internal capture, pass-by, or transportation demand management (TDM) features.

WCG estimated base vehicle trip generation with ITE Land Use Code (LUC) 712: Small Office Building to estimate the existing land use, and LUC 220 Multifamily Housing (Low-Rise) to estimate the proposed land use. Table 1 documents the resulting AM peak hour, and PM peak hour, and total weekday base vehicle trip generation estimate for the existing site, proposed site, and net difference.

TABLE 1: BASE TRIP GENERATION ESTIMATES FOR EXSITING AND PROPOSED LAND USES

			AM Peak Hour			PM Peak Hour			Weekday	
					Base			Base		Base
ITE LUC	Description	Size	Unit	Total	Enter	Exit	Total	Enter	Exit	Total
Existing Land Use										
712	Existing - Small Office (Law Office)	6	KSF	10	8	2	13	4	9	86
Proposed Land Use										
220	Proposed - Multifamily Housing (8 Unit)	8	Units	3	1	2	4	3	1	54
Net Change (Existing to Proposed)				-7	-7	0	-9	-1	-8	-32



As shown in Table 1, the conversion of the existing 6,000 square foot small office building into 8 units of multifamily housing is estimated to result in a net decrease in trip generation associated with the site.

The VTrans Traffic Impact Study Guidelines¹ state:

Generally, a traffic impact study should be considered when the proposed development generates 75 or more peak hour trips directly accessing the State Highway System.

The estimated net base vehicle trip generation of the proposed redevelopment of 251 South Union Street is less than the 75-trip peak hour threshold typically employed by VTrans to merit further transportation analysis.



FIGURE 1: LOCATION OF PROJECT SITE RELATIVE TO DOWNTOWN BURLINGTON

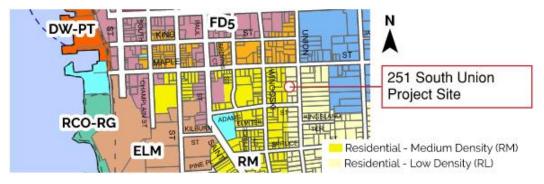


FIGURE 2: EXCERPT OF BURLINGTON ZONING MAP WITH PROJECT SITE

¹ VTrans Traffic Impact Study Guidelines, Revised April 2019 https://vtrans.vermont.gov/planning/development-review-services





FIGURE 3: EXCERPT OF BURLINGTON PARKING DISTRICT MAP WITH PROJECT SITE